

# **Flagstaff Watershed Protection Project**

## **Transportation Report**

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for:

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## Introduction

The transportation report analyzes the transportation system that would be needed to carry out the Flagstaff Watershed Protection Project (FWPP) and any changes that are proposed to the current travel management road status.

## Affected Environment

### *Existing Condition*

The FWPP consists of two different areas, the Dry Lake Hills and Mormon Mountain. Dry Lake Hills is comprised of both very steep slopes and gentle topography. The steep slopes have seen little to no timber harvesting historically and as a result do not have well-developed road systems to support timber harvesting activities. Many of the gentle slopes at Dry Lake Hills have been harvested in the past and have a limited but inadequate transportation system to support timber harvesting and fuels reduction work.

With the exception of the steep slopes of Mormon Mountain itself, the majority of the Mormon Mountain area has seen extensive harvesting historically and has a well-developed road system. However much of this road system is not in good condition for hauling timber. Most of the steep slopes of Mormon Mountain itself lack an adequate transportation system for timber hauling.

Many of the existing roads in both areas are in need of maintenance and in some cases reconstruction before timber hauling activities could occur.

## Environmental Consequences

### *Alternative 1 – No Action*

#### Proposed Transportation System

Under the no action alternative, no trees would be cut and there would be no need to utilize the current transportation system. No roads would be decommissioned and no new temporary roads constructed and subsequently rehabilitated. There would be no need to perform road maintenance on haul roads.

### *Effects Common to All Action Alternatives*

#### Required Transportation System

The Coconino National Forest Land Management Plan directs the forest to:

“Provide and manage a serviceable road transportation system that meets needs for public access, land management, resource protection, and user safety. Provisions are made for the construction and reconstruction, maintenance, seasonal and special closures of Forest roads; and obliteration of unnecessary roads,” (USDA FS 1987).

To achieve the objectives of the FWPP, a transportation system would be needed in order to access the area with log trucks, chip vans and other equipment needed to perform the required fuel reduction and timber removal work. Access is also needed for work such as non-commercial tree thinning and prescribed burning.

The three action alternatives have different transportation system requirements for two reasons. First, the same acres are not treated under all alternatives. This changes the access needs and the transportation system required. Secondly, different alternatives employ different harvest systems that have their own unique transportation requirements.

Transportation systems used under all action alternatives would utilize a combination of existing Forest Service system roads, Forest Service system roads that are relocated to reduce erosion, one decommissioned road that would be converted to a system road, new temporary roads and temporary roads that would be placed on existing road prisms. Roads that are no longer needed for management of national forest lands would also be decommissioned under this EIS. No new permanent roads are proposed under any alternative.

Existing Forest Service system roads that are in need of reconstruction or pre-haul maintenance would receive this work prior to use of the road for timber hauling.

### Harvesting System Assumptions Used in Analysis

Ground based harvesting systems drag or carry logs to a roadside landing area. This is commonly called skidding or forwarding. These harvest systems have roads located at the bottom of a harvest unit so that machines can skid trees downhill. Some uphill skidding is feasible in certain circumstances.

Skyline logging, (often referred to as skyline yarding) requires roads to be located above timber that is to be removed. This allows logs to be pulled uphill by cables and remain under control of the yarding machine. Attempting to yard the logs downhill is very difficult and dangerous as the logs being yarded roll on their own and do not remain under the control of the yarder. Roads for skyline yarding also have very exacting topographic requirements as they need to be located so that cables can be suspended free of the ground to a large extent.

Helicopters used for logging prefer to fly timber downhill with gravity to a road near the bottom of the harvest unit. However limited uphill flights are feasible in some instances.

### Road to Trail Conversion

The Coconino National Forest is currently conducting an environmental analysis of non-motorized recreation for trails, special uses and facilities in the Mt. Elden-Dry Lake Hills (MEDL) Recreation Planning Project. Much of this planning area overlaps with the Dry Lake Hills portion of the FWPP area. There is the possibility that new temporary roads constructed under the FWPP could at a later time be converted to recreational trails. The EIS currently being prepared for FWPP will not analyze for the possible environmental effects of any future road to trail conversion within the project area. It will only analyze for the construction, use and rehabilitation of new temporary roads, not their possible conversion to trails. If any road to trail conversion is considered under the MEDL environmental assessment, those environmental effects would be analyzed under the MEDL environmental assessment.

### Road Relocations

Under all alternatives, three roads within the project area are being proposed for partial relocation. These roads are FR 9466x at Mormon Mountain, FR 6353 and FR 789 in the Dry Lake Hills area.

**FR 9466x-** This road is currently limited to Forest Service administrative use only. The majority of this road has an acceptable grade. However approximately 0.19 miles are a steep

grade, (up to 14%) on shelf rock that is barely passable to a 4-wheeled drive pick-up. It is not suitable as a haul route for log trucks. This unusable segment would be decommissioned and replaced by a road segment of approximately 0.53 miles that would have a grade of approximately 8%. This would reduce erosion from the road's surface and facilitate use by log trucks and chip vans. FR 9466x's travel management status would remain, "Limited Forest Service administrative use only." This road would not be open to the public for motorized use under any alternative.

**FR 6353-** This road is currently limited to Forest Service administrative use only. Much of this road is usable for log hauling in its currently location. However approximately 1.12 miles have segments where grades are up to 16% and the road is oriented straight up and down the slope. In many of these areas the road has been eroded nearly 1.5 feet deep. These road segments are an ongoing erosion problem and would be very difficult to drain the water from due to the orientation straight up and down the slope and the fact that they are now deeply incised into the ground. These segments would be decommissioned and replaced with roads that have an 8% grade or less and be constructed so that they have a side that the water can be diverted off the road to prevent water running the length of the road causing erosion. FR 6353's travel management status would remain, "Limited Forest Service administrative use only". This road would not be open to the public for motorized use under any alternative.

**FR 789-** FR 789 begins at a junction with the FR 420, (the Schultz Pass road). The old road location crosses Schultz creek at this point and is currently closed with a gate. It then climbs to the mesa on top of the Dry Lake Hills and passes through a parcel of land owned by the Navajo Nation. The road passes close to the seasonal lake on the top of Dry Lake Hills and terminates on the western edge of mesa at the steep slopes that overlook the Cheshire neighborhood. While the road location is evident throughout its route, in some places it has been reduced to little more than a trail; this occurs mainly to where it passes through flat grasslands.

FR 789 provides the only access to the top of the Dry Lake Hills; however this road is currently decommissioned. Under the current proposal there are a number of temporary spur roads that would branch off from it in all alternatives. FR789 would also provide access for fire protection for the entire area between the Schultz Pass road and the Elden Lookout road. This road is also needed to provide access for thinning, fuel reduction work and prescribed burning after timber harvesting. For these reasons FR789 would be restored to the Coconino Forest road system with a travel management status of "Limited Forest Service administrative use only."

Road 789 would be relocated or rerouted in two areas. It would be rerouted to an existing road prism that is now used as a trail at segment "E" on the transportation map for all alternatives. Road 789 would no longer begin at the junction with the 420 road, it would tie into the 6353 road and have it's beginning at that point. FR 789 would also be relocated at segment "HH" on the transportation map. This would allow the road to avoid an unusably steep segment.

As mentioned earlier FR 789 passes through a parcel of land owned by the Navajo Nation. If it is not possible to utilize this portion of FR789, the road would be rerouted to use segments FF and P which are currently planned as temporary roads. If FR 789 is rerouted onto these segments they would become part of FR789.

This road would not be open to the public for motorized use under any alternative.

## Haul Routes

### Use of Public Roads by Forest Service Contractors

Forest Service contractors have the right to legally use public roads within and outside of the project area, subject to regulation by the public entity charged with jurisdiction of that roadway. In order to move timber from the project area to processing facilities it would be necessary for heavy trucks to use public roads through a portion of the city of Flagstaff. The Forest Service may restrict haul routes or timing of routes used by contractors in order to provide for public safety. The Forest Service cannot dictate the routes the contractor uses once they leave the forest. The routes here are only potential options that could be used.

#### *Dry Lake Hills*

This project would utilize several primary haul routes for log trucks and chip vans. For the Dry Lake Hills portion of the project these roads would be FR 557, the Elden Lookout road, FR 420 the Schultz Pass road, FR 556 the Elden Springs road and FR 522 and FR 516 the Snowbowl road. All of the timber removed from Mt Elden and the timber from the flats to the west of Mt Elden would use the Mt Elden Lookout road to its junction with the Schultz Pass road and then enter State Highway 180. **Under alternatives 2 and 3 approximately 3,800 truckloads would haul on this route. Under Alternative 4 approximately 2,600 truckloads would use this route.**

Nearly all of the area between Mt Elden Lookout road and Schultz Pass road as well as a portion of the project north of the Schultz pass road either be hauled down the Schultz Pass road to Highway 180 or on FR 556, the Elden Spring road to US Highway 89. **Under alternatives 2 and 3 approximately 5,200 truckloads would use these routes. Under Alternative 4 approximately 4,200 truckloads would use these routes.**

The very northern portion of the project would be hauled on FR 522 to the Snowbowl road and then onto State Highway 180. **Under alternatives 2 and 3 approximately 200 truckloads would use this route. Under Alternative 4 no loads would be hauled on this route.**

Trucks that haul onto State Highway 180 would most likely use N. Switzer Canyon Road to reach east Route 66. These loads would use Ponderosa Parkway and E. Butler Ave to enter Interstate 40 at the east Butler Ave interchange, exit 198. Trucks hauling to US Highway 89 would likely use East Route 66 to Country Club Drive and enter Interstate 40 at the Country Club interchange, exit 201. However, as mentioned previously, these are potential route options; the Forest Service cannot dictate where the contractor(s) go once they leave the National Forest.

#### *Mormon Mountain*

Timber hauled from Mormon Mtn. could be either hauled to Interstate 17 at Munds Park via FSR 240 or onto the Lake Mary road via county road 90. Both of these routes would utilize FR 132, 132A, 648 and 240 as well as County road 90. **Under alternative 2 approximately 4,800 truckloads would haul on these routes. Under Alternatives 3 and 4 approximately 4,700 truckloads would use these routes.**

## Temporary Roads

In order to access the project area for timber removal several temporary or “temp” roads would need to be constructed. The exact number temp roads required varies by alternative (see the discussion of alternatives below). Temp roads are designed to serve as short term access to a

specific area for timber removal and follow up treatments such as prescribed burning. Following completion of work in the area they serve, these temp roads would be rehabilitated and made impassable to vehicles. Rehabilitation work could consist of several actions including but not limited to: re-contouring, scarifying the road surface, grass seeding, constructing earthen berms to prevent erosion and discourage traffic and placing slash on the road surface.

It is likely that road prisms of temporary roads would still be at least partially visible after rehabilitation work is completed. The term “rehabilitation” is used in this document to describe this type of post project work done on these roads rather than the term “decommission” in order to avoid potential confusion. **Decommissioning** as used in this document refers to removing a Forest Service system road from its current status and placing it into a decommissioned status where it is no longer considered part of the forest’s road system.

The majority of the temp roads proposed in this project are “new temps.” This means that a temporary road is planned in an area where no road prism currently exists. Other temp roads are being placed on an existing road prism. These existing prisms are either user created roads or are roads that have been decommissioned from the Coconino Forest’s road system in the past. In either case, they are not Forest Service system roads and if they are to be used, they are considered temp roads. In the detailed roads tables for each alternative these roads are designated as “Haul Road- temp on existing road prism.” Following completion of work in the area they serve, they would be rehabilitated in the same manner as new temp roads.

The temp road locations and mileages are approximate and may vary somewhat when they are actually constructed. A very limited number of additional temp roads not listed in this analysis may be constructed and rehabilitated.

## Changes in Road Travel Management Status

Forest Service roads are classified into several categories for travel management purposes:

*Open to all vehicles-* The road is open to all types of vehicles

*Open to highway legal vehicles-* The road is open only to highway legal vehicles

*Closed-* The road is closed to all vehicles and can only be opened for use by completing a NEPA document

*Limited to Forest Service Administrative Use-* The road is closed to all vehicles except for Forest Service vehicles on official business and those of Forest Service cooperators, contractors and permittees.

*Decommissioned-* The road has been decommissioned and is no longer considered a Forest Service system road. It is not open for use. If it is to be used, it must be as a new temporary road or be restored to a system road under a NEPA document.

This EIS proposes some changes in travel management status and also proposes to decommission several roads that are no longer needed for management purposes. It does not make any changes to roads that are open to the public. The current level of public access would not change. These proposed changes are listed in the detailed road listing for each alternative and are summarized in

Table 1. They are the same under all action alternatives.



**Table 1: Roads within the FWPP area, their current status and proposed status post-implementation for all alternatives**

Road Number	Mileage	Current Status	Post Project Status
789	1.829	Decommissioned/Converted	FS Admin use only
6274	0.411	FS Admin use only	Decommissioned/Converted
6275 (only a portion)	0.109	FS Admin use only	Decommissioned/Converted
6353 (Only a portion)	1.12	FS Admin use only	Decommissioned/Converted
6356	0.496	FS Admin use only	Decommissioned/Converted
6361	0.172	FS Admin use only	Decommissioned/Converted
9122 J	0.217	FS Admin use only	Decommissioned/Converted
9129 Y	0.445	Closed Unless Open with NEPA	Decommissioned/Converted
9166 K	0.827	Closed Unless Open with NEPA	Decommissioned/Converted
9166 M	0.134	Closed Unless Open with NEPA	Decommissioned/Converted
9173 D	0.265	Closed Unless Open with NEPA	Decommissioned/Converted
9466 X (Only a portion)	0.19	FS Admin use only	Decommissioned/Converted

Appropriate action would be taken on roads that are decommissioned under this EIS as well as previously decommissioned roads within the project area which require additional rehabilitation work to reduce erosion and discourage vehicle use. These actions could include but not be limited to: re-contouring, scarifying the road surface, grass seeding, constructing earthen berms and placing slash on the road surface.

### Road Maintenance

Road maintenance on roads that receive substantial used by the public are often maintained by the Forest Service on a regular basis as funding allows. When there is a substantial increase in use of a road by a Forest Service contractor for uses such as log hauling, the associated contractor is usually required to perform maintenance both during and after their use of the road commensurate with their use. This maintenance is often blading and reshaping of the road surface. Road maintenance on roads that are closed to the public would be performed by the logging contractor.

On this project maintenance could also include applying dust abatement on approximate 0.70 miles of FR 556 and 0.25 miles on FR 420. Both of these segments are adjacent to residences where road dust has the potential to be a concern.

## *Alternative 2 – Proposed Action with Cable Logging*

### Proposed Road System

Under alternative 2, the following actions would occur regarding road use on the Dry Lake Hills and Mormon Mountain Areas, respectively. These roads are shown in Attachments 1 and 2.

#### *Dry Lake Hills*

System haul roads within the project area	18.07 miles
System haul roads outside the project area	14.33 miles
New temporary haul roads constructed	14.64 miles
Temporary roads on existing road prisms	2.75 miles
Temporary roads rehabilitated	17.39 miles

Relocated system road used for hauling	1.57 miles
System roads decommissioned	4.19 miles

### *Mormon Mountain*

System haul roads within the project area	16.46 miles
System haul roads outside the project area	18.13 miles
New temporary haul roads constructed	1.07 miles
Temporary roads on existing road prisms	2.52 miles
Temporary road rehabilitated	3.59 miles
Relocated system road used for hauling	0.53 miles
System roads decommissioned	0.19 miles

Table 2 and Table 3 show a detailed listing of the roads involved in this project in both the Dry Lake Hills and Mormon Mountain areas. These tables display the current travel management status and the status after the project of all roads both existing and decommissioned within the project area, as well as roads used for hauling outside of the project area. It also displays what actions would take place on these roads. All roads designated as “haul road” would be used to haul timber under this alternative.

**Table 2: Road system associated with Alternative 2, Dry Lake Hills**

<b>Road Number</b>	<b>Mileage</b>	<b>Current Travel Management Status</b>	<b>Use in Alt 2</b>	<b>Post Project Travel Management Status</b>
420	0.727	MVUM-open, public roads or highways	Haul Road- Outside Project Area	No Change to Road Status
420	0.001	MVUM-open, public roads or highways	Haul Road- FS System Road	No Change to Road Status
420	4.750	MVUM-open, hwy-legal vehicles, yearlong	Haul Road- FS System Road	No Change to Road Status
420	0.378	MVUM-open, hwy-legal vehicles, yearlong	Haul Road- Outside Project Area	No Change to Road Status
516	2.398	MVUM-open, hwy-legal vehicles, yearlong	Haul Road- Outside Project Area	No Change to Road Status
522	0.411	MVUM-open, all vehicles, yearlong	Haul Road- FS System Road	No Change to Road Status
522	0.525	Decommissioned or converted	No Use	No Change to Road Status
522	0.008	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
522	3.476	MVUM-open, all vehicles, yearlong	Haul Road- Outside	No Change to Road Status

Road Number	Mileage	Current Travel Management Status	Use in Alt 2	Post Project Travel Management Status
			Project Area	
522	0.672	Decommissioned or converted	Haul Road- Temp on Existing Road Prism	Rehabilitate Road Prism
556	3.415	MVUM-open, hwy-legal vehicles, yearlong	Haul Road- Outside Project Area	No Change to Road Status
556	1.250	MVUM-open, public roads or highways	Haul Road- Outside Project Area	No Change to Road Status
557	0.971	MVUM-open, public roads or highways	Haul Road- Outside Project Area	No Change to Road Status
557	4.752	MVUM-open, all vehicles, yearlong	Haul Road- FS System Road	No Change to Road Status
557	0.130	MVUM-open, all vehicles, yearlong	No Use	No Change to Road Status
557	0.421	MVUM-open, public roads or highways	Haul Road- FS System Road	No Change to Road Status
557	0.047	MVUM-open, all vehicles, yearlong	Haul Road- Outside Project Area	No Change to Road Status
557A	0.608	MVUM-open, all vehicles, yearlong	Haul Road- FS System Road	No Change to Road Status
557A	0.127	MVUM-open, all vehicles, yearlong	No Use	No Change to Road Status
557B	0.256	Closed unless re-opened with NEPA	Haul Road- FS System Road	No Change to Road Status
6273	1.500	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
6274	0.411	Limited FS admin use only	No Use	Decommissioned or converted
6275	0.109	Limited FS admin use only	No Use	Decommissioned or converted
6275	0.002	Decommissioned or converted	Haul Road- Outside Project Area	No Change to Road Status
6275	1.086	Limited FS admin use only	Haul Road- Outside Project Area	No Change to Road Status
6275	1.885	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status

<b>Road Number</b>	<b>Mileage</b>	<b>Current Travel Management Status</b>	<b>Use in Alt 2</b>	<b>Post Project Travel Management Status</b>
6275	0.700	Decommissioned or converted	No Use	No Change to Road Status
6275	0.276	Limited FS admin use only	No Use	No Change to Road Status
6276	0.757	Decommissioned or converted	Haul Road- Temp on Existing Road Prism	Rehabilitate Road Prism
6277	1.444	Decommissioned or converted	No Use	No Change to Road Status
6353	1.120	Limited FS admin use only	No Use	Decommissioned or converted
6353	0.173	MVUM-open, hwy-legal vehicles, yearlong	Haul Road- FS System Road	No Change to Road Status
6353	0.802	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
6354	0.121	Closed unless re-opened with NEPA	No Use	No Change to Road Status
6355	0.333	Decommissioned or converted	Haul Road- Temp on Existing Road Prism	Rehabilitate Road Prism
6356	0.496	Limited FS admin use only	Haul Road- FS System Road	Decommissioned or converted
6357	1.857	Closed unless re-opened with NEPA	No Use	No Change to Road Status
6360	0.371	Limited FS admin use only	No Use	No Change to Road Status
6361	0.172	Limited FS admin use only	No Use	Decommissioned or converted
743	1.877	MVUM-open, all vehicles, yearlong	No Use	No Change to Road Status
789	0.583	Decommissioned or converted	Haul Road- Outside Project Area	Limited FS Admin Use Only
789	1.246	Decommissioned or converted	Haul Road- Limited FS Admin Use Only	Limited FS Admin Use Only
789	0.169	Decommissioned or converted	No Use	No Change to Road Status
789	0.376	Decommissioned or	Haul Road-	Rehabilitate

Road Number	Mileage	Current Travel Management Status	Use in Alt 2	Post Project Travel Management Status
		converted	Temp on Existing Road Prism	Road Prism
9122J	0.217	Limited FS admin use only	No Use	Decommissioned or converted
9122J	0.410	Decommissioned or converted	No Use	No Change to Road Status
9122J	0.483	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9128H	0.252	Decommissioned or converted	No Use	No Change to Road Status
9128Y	0.100	MVUM-open, hwy-legal vehicles, yearlong	Haul Road- FS System Road	No Change to Road Status
9128Y	0.262	Closed unless re-opened with NEPA	No Use	No Change to Road Status
9128Y	0.402	Limited FS admin use only	No Use	No Change to Road Status
9128Y	0.178	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9129Y	0.445	Closed unless re-opened with NEPA	No Use	Decommissioned or converted
9131W	0.102	Decommissioned or converted	No Use	No Change to Road Status
9166K	0.827	Closed unless re-opened with NEPA	No Use	Decommissioned or converted
9166M	0.134	Closed unless re-opened with NEPA	No Use	Decommissioned or converted
9166N	1.376	Closed unless re-opened with NEPA	No Use	No Change to Road Status
9173A	0.119	MVUM-open, all vehicles, yearlong	No Use	No Change to Road Status
9173B	0.160	Decommissioned or converted	No Use	No Change to Road Status
9173D	0.265	Closed unless re-opened with NEPA	No Use	Decommissioned or converted
A	2.541	N/A	Haul Road-Temp	Rehabilitate Road Prism
AA	0.086	N/A	Haul Road-Temp	Rehabilitate Road Prism
B	0.261	N/A	Haul Road-Temp	Rehabilitate Road Prism
BB	1.031	N/A	Haul Road-	Rehabilitate

Road Number	Mileage	Current Travel Management Status	Use in Alt 2	Post Project Travel Management Status
			Temp	Road Prism
C	0.158	N/A	Haul Road-Temp on Existing Road Prism	Rehabilitate Road Prism
CC	0.144	N/A	Haul Road-Temp Outside Project	Rehabilitate Road Prism
D	1.158	N/A	Haul Road-Temp	Rehabilitate Road Prism
DD	0.371	N/A	Haul Road-Temp	Rehabilitate Road Prism
E	0.197	N/A	Haul Road-Relocate FR789	Limited FS Admin Use Only
F	0.283	N/A	Haul Road-Temp	Rehabilitate Road Prism
FF	0.502	N/A	Haul Road-Temp	Rehabilitate Road Prism
G	0.055	N/A	Haul Road-Temp	Rehabilitate Road Prism
GG	0.469	N/A	Haul Road-Relocate FR6353	Limited FS Admin Use Only
H	0.450	N/A	Haul Road-Temp	Rehabilitate Road Prism
HH	0.218	N/A	Haul Road-Relocate FR789	Limited FS Admin Use Only
I	0.092	N/A	Haul Road-Temp	Rehabilitate Road Prism
II	0.384	N/A	Haul Road-Relocate FR6353	Limited FS Admin Use Only
J	0.454	N/A	Haul Road-Temp on Existing Road Prism	Rehabilitate Road Prism
JJ	0.311	N/A	Haul Road-Relocate FR6353	Limited FS Admin Use Only
K	0.809	N/A	Haul Road-Temp	Rehabilitate Road Prism

<b>Road Number</b>	<b>Mileage</b>	<b>Current Travel Management Status</b>	<b>Use in Alt 2</b>	<b>Post Project Travel Management Status</b>
L	0.285	N/A	Haul Road-Temp	Rehabilitate Road Prism
M	0.249	N/A	Haul Road-Temp	Rehabilitate Road Prism
N	0.684	N/A	Haul Road-Temp	Rehabilitate Road Prism
O	0.840	N/A	Haul Road-Temp	Rehabilitate Road Prism
P	1.504	N/A	Haul Road-Temp	Rehabilitate Road Prism
Q	0.217	N/A	Haul Road-Temp	Rehabilitate Road Prism
R	0.486	N/A	Haul Road-Temp	Rehabilitate Road Prism
R	0.063	N/A	Haul Road-Temp	Rehabilitate Road Prism
S	0.118	N/A	Haul Road-Temp	Rehabilitate Road Prism
S	0.114	N/A	Haul Road-Temp	Rehabilitate Road Prism
T	0.078	N/A	Haul Road-Temp	Rehabilitate Road Prism
U	0.336	N/A	Haul Road-Temp	Rehabilitate Road Prism
V	0.588	N/A	Haul Road-Temp	Rehabilitate Road Prism
W	0.163	N/A	Haul Road-Temp	Rehabilitate Road Prism
X	0.349	N/A	Haul Road-Temp	Rehabilitate Road Prism
Y	0.216	N/A	Haul Road-Temp	Rehabilitate Road Prism
Z	0.570	N/A	Haul Road-Temp	Rehabilitate Road Prism

**Table 3: Road system associated with Alternative 2, Mormon Mountain**

<b>Road Number</b>	<b>Mileage</b>	<b>Current Road Management Status</b>	<b>Use Under Alternative 2</b>	<b>Post Project Road Management Status</b>
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<b>Road Number</b>	<b>Mileage</b>	<b>Current Road Management Status</b>	<b>Use Under Alternative 2</b>	<b>Post Project Road Management Status</b>
132	2.37	MVUM-open, public roads or highways	Haul Road- Outside Project Area	No Change to Road Status
132	4.49	MVUM-open, public roads or highways	Haul Road- FS System Road	No Change to Road Status
132A	2.52	MVUM-open, all vehicles, yearlong	Haul Road- Outside Project Area	No Change to Road Status
132A	1.59	MVUM-open, all vehicles, yearlong	Haul Road- FS System Road	No Change to Road Status
240	9.84	MVUM-open, hwy-legal vehicles, yearlong	Haul Road- Outside Project Area	No Change to Road Status
240	1.91	MVUM-open, public roads or highways	Haul Road- Outside Project Area	No Change to Road Status
648	0.96	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
648	2.15	MVUM-open, all vehicles, yearlong	Haul Road- FS System Road	No Change to Road Status
9410X	0.98	Limited FS admin use only	Haul Road- Outside Project Area	No Change to Road Status
9411	0.33	Limited FS admin use only	Haul Road- Outside Project Area	No Change to Road Status
9411A	0.28	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9411B	0.45	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9411C	0.10	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9417P	0.21	Decommissioned or converted	Haul Road- Temp on Existing Road Prism	Rehabilitate Road Prism
9421M	0.16	Closed unless re-opened with NEPA	Haul Road- Outside Project Area	No Change to Road Status
9421M	0.52	Closed unless re-opened with NEPA	Haul Road- FS System Road	No Change to Road Status
9421N	0.60	Closed unless re-opened with NEPA	Haul Road- FS System Road	No Change to Road Status



<b>Road Number</b>	<b>Mileage</b>	<b>Current Road Management Status</b>	<b>Use Under Alternative 2</b>	<b>Post Project Road Management Status</b>
9421P	0.23	Decommissioned or converted	No Use	No Change to Road Status
9459C	0.79	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9459D	0.03	Limited FS admin use only	Haul Road- Outside Project Area	No Change to Road Status
9459D	0.18	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9460	0.69	Decommissioned or converted	Haul Road- Temp on Existing Road Prism	Rehabilitate Road Prism
9460	0.35	Decommissioned or converted	No Use	No Change to Road Status
9465W	0.22	Decommissioned or converted	No Use	No Change to Road Status
9465X	0.33	Closed unless re-opened with NEPA	Haul Road- FS System Road	No Change to Road Status
9465Y	0.43	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9466D	0.36	Decommissioned or converted	No Use	No Change to Road Status
9466F	0.22	Decommissioned or converted	No Use	No Change to Road Status
9466G	0.19	Decommissioned or converted	No Use	No Change to Road Status
9466K	0.11	Decommissioned or converted	No Use	No Change to Road Status
9466P	0.34	Decommissioned or converted	Haul Road- Temp on Existing Road Prism	Rehabilitate Road Prism
9466Q	0.08	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9466X	3.51	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9466X	0.19	Limited FS admin use only	No Use	Decommissioned or Converted
9467	0.50	Decommissioned or converted	Haul Road- Temp on Existing Road Prism	Rehabilitate Road Prism

Road Number	Mileage	Current Road Management Status	Use Under Alternative 2	Post Project Road Management Status
9468	0.22	Decommissioned or converted	Haul Road-Temp on Existing Road Prism	Rehabilitate Road Prism
9469	0.21	Decommissioned or converted	Haul Road-Temp on Existing Road Prism	Rehabilitate Road Prism
9471X	0.36	Decommissioned or converted	No Use	No Change to Road Status
KK	0.36	N/A	Haul Road-Temp on Existing Road Prism	Rehabilitate Road Prism
LL	1.04	N/A	Haul Road-Temp	Rehabilitate Road Prism
MM	0.53	N/A	Haul Road-Relocate FR9466X	Limited FS Admin Use Only
NN	0.07	N/A	Haul Road-Temp	Rehabilitate Road Prism

### *Alternative 3: Proposed Action without Cable Logging*

#### Proposed Transportation System

Under alternative 3 the following actions would occur regarding road use, on the Dry Lake Hills and Mormon Mountain areas, respectively. These roads are shown in Attachments 3 and 4.

#### *Dry Lake Hills*

System haul roads within the project area	18.07miles
System haul roads outside the project area	14.33 miles
New temporary haul roads constructed	9.91 miles
Temporary roads on existing road prisms	2.75 miles
Temporary road rehabilitated	12.66 miles
Relocated system road used as haul road	1.57 miles
System road decommissioned	4.19 miles

#### *Mormon Mountain*

System haul roads within the project area	16.46 miles
System haul roads outside the project area	18.13 miles
New temporary haul roads constructed	0.0 miles
Temporary roads on existing road prisms	2.52 miles
Temporary road rehabilitated	2.52 miles

Relocated system road used for hauling 0.53 miles  
 System roads decommissioned 0.19 miles

Table 4 and Table 5 show a detailed listing of the roads involved in this project in both the Dry Lake Hills and Mormon Mountain areas. These tables display the current travel management status and the status after the project of all roads both existing and decommissioned within the project area, as well as roads used for hauling outside of the project area. It also displays what actions will take place on these roads. All roads designated as “haul road” would be used to haul timber under this alternative.

**Table 4: Road system associated with Alternative 3, Dry Lake Hills**

<b>Road Number</b>	<b>Mileage</b>	<b>Current Travel Management Status</b>	<b>Use in Alternative 3</b>	<b>Post Project Travel Management Status</b>
420	0.727	MVUM-open, public roads or highways	Haul Road- Outside Project Area	No Change to Road Status
420	0.001	MVUM-open, public roads or highways	Haul Road- FS System Road	No Change to Road Status
420	4.750	MVUM-open, hwy-legal vehicles, yearlong	Haul Road- FS System Road	No Change to Road Status
420	0.378	MVUM-open, hwy-legal vehicles, yearlong	Haul Road- Outside Project Area	No Change to Road Status
516	2.398	MVUM-open, hwy-legal vehicles, yearlong	Haul Road- Outside Project Area	No Change to Road Status
522	0.411	MVUM-open, all vehicles, yearlong	Haul Road- FS System Road	No Change to Road Status
522	0.525	Decommissioned or converted	No Use	No Change to Road Status
522	0.008	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
522	3.476	MVUM-open, all vehicles, yearlong	Haul Road- Outside Project Area	No Change to Road Status
522	0.672	Decommissioned or converted	Haul Road- Temp on Existing Road Prism	Rehabilitate Road Prism
556	3.415	MVUM-open, hwy-legal vehicles, yearlong	Haul Road- Outside Project Area	No Change to Road Status
556	1.250	MVUM-open, public roads or highways	Haul Road- Outside	No Change to Road Status

Road Number	Mileage	Current Travel Management Status	Use in Alternative 3	Post Project Travel Management Status
			Project Area	
557	0.971	MVUM-open, public roads or highways	Haul Road- Outside Project Area	No Change to Road Status
557	4.752	MVUM-open, all vehicles, yearlong	Haul Road- FS System Road	No Change to Road Status
557	0.130	MVUM-open, all vehicles, yearlong	No Use	No Change to Road Status
557	0.421	MVUM-open, public roads or highways	Haul Road- FS System Road	No Change to Road Status
557	0.047	MVUM-open, all vehicles, yearlong	Haul Road- Outside Project Area	No Change to Road Status
557A	0.608	MVUM-open, all vehicles, yearlong	Haul Road- FS System Road	No Change to Road Status
557A	0.127	MVUM-open, all vehicles, yearlong	No Use	No Change to Road Status
557B	0.256	Closed unless re-opened with NEPA	Haul Road- FS System Road	No Change to Road Status
6273	1.500	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
6274	0.411	Limited FS admin use only	No Use	Decommissioned or converted
6275	0.109	Limited FS admin use only	No Use	Decommissioned or converted
6275	0.002	Decommissioned or converted	Haul Road- Outside Project Area	No Change to Road Status
6275	1.086	Limited FS admin use only	Haul Road- Outside Project Area	No Change to Road Status
6275	1.885	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
6275	0.700	Decommissioned or converted	No Use	No Change to Road Status
6275	0.276	Limited FS admin use only	No Use	No Change to Road Status
6276	0.757	Decommissioned or converted	Haul Road- Temp on Existing Road Prism	Rehabilitate Road Prism
6277	1.444	Decommissioned or converted	No Use	No Change to Road Status

<b>Road Number</b>	<b>Mileage</b>	<b>Current Travel Management Status</b>	<b>Use in Alternative 3</b>	<b>Post Project Travel Management Status</b>
6353	1.120	Limited FS admin use only	No Use	Decommissioned or converted
6353	0.173	MVUM-open, hwy-legal vehicles, yearlong	Haul Road- FS System Road	No Change to Road Status
6353	0.802	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
6354	0.121	Closed unless re-opened with NEPA	No Use	No Change to Road Status
6355	0.333	Decommissioned or converted	Haul Road- Temp on Existing Road Prism	Rehabilitate Road Prism
6356	0.496	Limited FS admin use only	Haul Road- FS System Road	Decommissioned or converted
6357	1.857	Closed unless re-opened with NEPA	No Use	No Change to Road Status
6360	0.371	Limited FS admin use only	No Use	No Change to Road Status
6361	0.172	Limited FS admin use only	No Use	Decommissioned or converted
743	1.877	MVUM-open, all vehicles, yearlong	No Use	No Change to Road Status
789	0.583	Decommissioned or converted	Haul Road- Outside Project Area	Limited FS Admin Use Only
789	1.246	Decommissioned or converted	Haul Road- Limited FS Admin Use Only	Limited FS Admin Use Only
789	0.169	Decommissioned or converted	No Use	No Change to Road Status
789	0.376	Decommissioned or converted	Haul Road- Temp on Existing Road Prism	Rehabilitate Road Prism
9122J	0.217	Limited FS admin use only	No Use	Decommissioned or converted
9122J	0.410	Decommissioned or converted	No Use	No Change to Road Status
9122J	0.483	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9128H	0.252	Decommissioned or	No Use	No Change to

Road Number	Mileage	Current Travel Management Status	Use in Alternative 3	Post Project Travel Management Status
		converted		Road Status
9128Y	0.100	MVUM-open, hwy-legal vehicles, yearlong	Haul Road- FS System Road	No Change to Road Status
9128Y	0.262	Closed unless re-opened with NEPA	No Use	No Change to Road Status
9128Y	0.402	Limited FS admin use only	No Use	No Change to Road Status
9128Y	0.178	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9129Y	0.445	Closed unless re-opened with NEPA	No Use	Decommissioned or converted
9131W	0.102	Decommissioned or converted	No Use	No Change to Road Status
9166K	0.827	Closed unless re-opened with NEPA	No Use	Decommissioned or converted
9166M	0.134	Closed unless re-opened with NEPA	No Use	Decommissioned or converted
9166N	1.376	Closed unless re-opened with NEPA	No Use	No Change to Road Status
9173A	0.119	MVUM-open, all vehicles, yearlong	No Use	No Change to Road Status
9173B	0.160	Decommissioned or converted	No Use	No Change to Road Status
9173D	0.265	Closed unless re-opened with NEPA	No Use	Decommissioned or converted
A	2.541	N/A	Haul Road-Temp	Rehabilitate Road Prism
AA	0.086	N/A	Haul Road-Temp	Rehabilitate Road Prism
B	0.261	N/A	Haul Road-Temp	Rehabilitate Road Prism
BB	1.031	N/A	Not in Alt	Not in Alt
C	0.158	N/A	Haul Road-Temp on Existing Road Prism	Rehabilitate Road Prism
CC	0.144	N/A	Haul Road-Temp Outside Project	Rehabilitate Road Prism
D	1.158	N/A	Haul Road-Temp	Rehabilitate Road Prism
DD	0.371	N/A	Haul Road-	Rehabilitate

Road Number	Mileage	Current Travel Management Status	Use in Alternative 3	Post Project Travel Management Status
			Temp	Road Prism
E	0.197	N/A	Haul Road-Relocate FR789	Limited FS Admin Use Only
F	0.283	N/A	Not in Alt	Not in Alt
FF	0.502	N/A	Haul Road-Temp	Rehabilitate Road Prism
G	0.055	N/A	Not in Alt	Not in Alt
GG	0.469	N/A	Haul Road-Relocate FR6353	Limited FS Admin Use Only
H	0.450	N/A	Not in Alt	Not in Alt
HH	0.218	N/A	Haul Road-Relocate FR789	Limited FS Admin Use Only
I	0.092	N/A	Not in Alt	Not in Alt
II	0.384	N/A	Haul Road-Relocate FR6353	Limited FS Admin Use Only
J	0.454	N/A	Haul Road-Temp on Existing Road Prism	Rehabilitate Road Prism
JJ	0.311	N/A	Haul Road-Relocate FR6353	Limited FS Admin Use Only
K	0.809	N/A	Not in Alt	Not in Alt
L	0.285	N/A	Haul Road-Temp	Rehabilitate Road Prism
M	0.249	N/A	Not in Alt	Not in Alt
N	0.684	N/A	Haul Road-Temp	Rehabilitate Road Prism
O	0.840	N/A	Haul Road-Temp	Rehabilitate Road Prism
P	1.504	N/A	Haul Road-Temp	Rehabilitate Road Prism
Q	0.217	N/A	Haul Road-Temp	Rehabilitate Road Prism
R	0.486	N/A	Not in Alt	Not in Alt
R	0.063	N/A	Haul Road-Temp	Rehabilitate Road Prism
S	0.118	N/A	Not in Alt	Not in Alt

Road Number	Mileage	Current Travel Management Status	Use in Alternative 3	Post Project Travel Management Status
S	0.114	N/A	Haul Road-Temp	Rehabilitate Road Prism
T	0.078	N/A	Not in Alt	Not in Alt
U	0.336	N/A	Not in Alt	Not in Alt
V	0.588	N/A	Not in Alt	Not in Alt
W	0.163	N/A	Not in Alt	Not in Alt
X	0.349	N/A	Haul Road-Temp	Rehabilitate Road Prism
Y	0.216	N/A	Haul Road-Temp	Rehabilitate Road Prism
Z	0.570	N/A	Haul Road-Temp	Rehabilitate Road Prism

Table 5: Road system associated with Alternative 3, Mormon Mountain

Road Number	Mileage	Current Road Management Status	Use Under Alternative 3	Post Project Road Management Status
132	2.37	MVUM-open, public roads or highways	Haul Road-Outside Project Area	No Change to Road Status
132	4.49	MVUM-open, public roads or highways	Haul Road- FS System Road	No Change to Road Status
132A	2.52	MVUM-open, all vehicles, yearlong	Haul Road-Outside Project Area	No Change to Road Status
132A	1.59	MVUM-open, all vehicles, yearlong	Haul Road- FS System Road	No Change to Road Status
240	9.84	MVUM-open, hwy-legal vehicles, yearlong	Haul Road-Outside Project Area	No Change to Road Status
240	1.91	MVUM-open, public roads or highways	Haul Road-Outside Project Area	No Change to Road Status
648	0.96	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
648	2.15	MVUM-open, all vehicles, yearlong	Haul Road- FS System Road	No Change to Road Status
9410X	0.98	Limited FS admin use only	Haul Road-Outside Project Area	No Change to Road Status



<b>Road Number</b>	<b>Mileage</b>	<b>Current Road Management Status</b>	<b>Use Under Alternative 3</b>	<b>Post Project Road Management Status</b>
9411	0.33	Limited FS admin use only	Haul Road- Outside Project Area	No Change to Road Status
9411A	0.28	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9411B	0.45	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9411C	0.10	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9417P	0.21	Decommissioned or converted	Haul Road- Temp on Existing Road Prism	Rehabilitate Road Prism
9421M	0.16	Closed unless re-opened with NEPA	Haul Road- Outside Project Area	No Change to Road Status
9421M	0.52	Closed unless re-opened with NEPA	Haul Road- FS System Road	No Change to Road Status
9421N	0.60	Closed unless re-opened with NEPA	Haul Road- FS System Road	No Change to Road Status
9421P	0.23	Decommissioned or converted	No Use	No Change to Road Status
9459C	0.79	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9459D	0.03	Limited FS admin use only	Haul Road- Outside Project Area	No Change to Road Status
9459D	0.18	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9460	0.69	Decommissioned or converted	Haul Road- Temp on Existing Road Prism	Rehabilitate Road Prism
9460	0.35	Decommissioned or converted	No Use	No Change to Road Status
9465W	0.22	Decommissioned or converted	No Use	No Change to Road Status
9465X	0.33	Closed unless re-opened with NEPA	Haul Road- FS System Road	No Change to Road Status
9465Y	0.43	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9466D	0.36	Decommissioned or converted	No Use	No Change to Road Status

<b>Road Number</b>	<b>Mileage</b>	<b>Current Road Management Status</b>	<b>Use Under Alternative 3</b>	<b>Post Project Road Management Status</b>
9466F	0.22	Decommissioned or converted	No Use	No Change to Road Status
9466G	0.19	Decommissioned or converted	No Use	No Change to Road Status
9466K	0.11	Decommissioned or converted	No Use	No Change to Road Status
9466P	0.34	Decommissioned or converted	Haul Road- Temp on Existing Road Prism	Rehabilitate Road Prism
9466Q	0.08	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9466X	3.51	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9466X	0.19	Limited FS admin use only	No Use	Decommissioned or Converted
9467	0.50	Decommissioned or converted	Haul Road- Temp on Existing Road Prism	Rehabilitate Road Prism
9468	0.22	Decommissioned or converted	Haul Road- Temp on Existing Road Prism	Rehabilitate Road Prism
9469	0.21	Decommissioned or converted	Haul Road- Temp on Existing Road Prism	Rehabilitate Road Prism
9471X	0.36	Decommissioned or converted	No Use	No Change to Road Status
KK	0.36	N/A	Haul Road- Temp on Existing Road Prism	Rehabilitate Road Prism
LL	1.04	N/A	Not in Alt	Not in Alt
MM	0.53	N/A	Haul Road- Relocate FR9466X	Limited FS Admin Use Only
NN	0.07	N/A	Not in Alt	Not in Alt

## *Alternative 4: Minimal Treatment Alternative*

### Proposed Road System

Under alternative 4 the following actions would occur regarding road use on the Dry Lake Hills and Mormon Mountain Areas, respectively. These roads are shown in Attachments 5 and 6.

Alternative 4 differs from Alternatives 2 and 3 in that there would be no hauling on FR 522 and FR 516 (Snowbowl road), and also includes fewer temp roads than the other two action alternatives (12.71 miles versus 20.98 miles and 15.17 miles for Alternatives 2 and 3, respectively). .

#### *Dry Lake Hills*

System haul roads within the project area	13.04 miles
System haul roads outside the project area	7.37 miles
New temporary haul roads constructed	9.20 miles
Temporary roads on existing road prisms	0.99 miles
Temporary road rehabilitated	10.19 miles
Relocated system road used as haul road	1.57 miles
System road decommissioned	4.19 miles

#### *Mormon Mountain*

System haul roads within the project area	16.46 miles
System haul roads outside the project area	18.13 miles
New temporary haul roads constructed	0 miles
Temporary roads on existing road prisms	2.52 miles
Temporary road rehabilitated	2.52 miles
Relocated system road used for hauling	0.53 miles
System roads decommissioned	0.19 miles

Table 6 and Table 7 show a detailed listing of the roads involved in this project in both the Dry Lake Hills and Mormon Mountain areas. These tables display the current travel management status and the status after the project of all roads both existing and decommissioned within the project area, as well as roads used for hauling outside of the project area. It also displays what actions would take place on these roads. All roads designated as “haul road” would be used to haul timber under this alternative.

**Table 6: Road system associated with Alternative 4, Dry Lake Hills**

<b>Road Number</b>	<b>Mileage</b>	<b>Current Travel Management Status</b>	<b>Use In Alternative 4</b>	<b>Post Project Travel Management Status</b>
420	0.727	MVUM-open, public roads or highways	Haul Road- Outside Project Area	No Change to Road Status
420	0.001	MVUM-open, public roads or highways	Haul Road- FS System Road	No Change to Road Status
420	4.750	MVUM-open, hwy-	Haul Road- FS	No Change to

Road Number	Mileage	Current Travel Management Status	Use In Alternative 4	Post Project Travel Management Status
		legal vehicles, yearlong	System Road	Road Status
420	0.378	MVUM-open, hwy-legal vehicles, yearlong	Haul Road-Outside Project Area	No Change to Road Status
516	2.398	MVUM-open, hwy-legal vehicles, yearlong	Not in Alternative	Not in Alternative
522	0.411	MVUM-open, all vehicles, yearlong	Not in Alternative	Not in Alternative
522	0.525	Decommissioned or converted	Not in Alternative	Not in Alternative
522	0.008	Limited FS admin use only	Not in Alternative	Not in Alternative
522	0.672	Decommissioned or converted	Not in Alternative	Not in Alternative
522	3.476	MVUM-open, all vehicles, yearlong	Not in Alternative	Not in Alternative
556	3.415	MVUM-open, hwy-legal vehicles, yearlong	Haul Road-Outside Project Area	No Change to Road Status
556	1.250	MVUM-open, public roads or highways	Haul Road-Outside Project Area	No Change to Road Status
557	0.971	MVUM-open, public roads or highways	Haul Road-Outside Project Area	No Change to Road Status
557	4.752	MVUM-open, all vehicles, yearlong	Haul Road- FS System Road	No Change to Road Status
557	0.130	MVUM-open, all vehicles, yearlong	No Use	No Change to Road Status
557	0.421	MVUM-open, public roads or highways	Haul Road- FS System Road	No Change to Road Status
557	0.047	MVUM-open, all vehicles, yearlong	Haul Road-Outside Project Area	No Change to Road Status
557A	0.608	MVUM-open, all vehicles, yearlong	Haul Road- FS System Road	No Change to Road Status
557A	0.127	MVUM-open, all vehicles, yearlong	Not in Alternative	No Change to Road Status
557B	0.256	Closed unless re-opened with NEPA	Not in Alternative	No Change to Road Status
6273	1.500	Limited FS admin use	Not in	Not in

<b>Road Number</b>	<b>Mileage</b>	<b>Current Travel Management Status</b>	<b>Use In Alternative 4</b>	<b>Post Project Travel Management Status</b>
		only	Alternative	Alternative
6274	0.411	Limited FS admin use only	No Use	Decommissioned or Converted
6275	0.109	Limited FS admin use only	No Use	Decommissioned or Converted
6275	1.885	Limited FS admin use only	Not in Alternative	No Change to Road Status
6275	0.002	Decommissioned or converted	Not in Alternative	Not in Alternative
6275	1.086	Limited FS admin use only	Not in Alternative	Not in Alternative
6275	0.700	Decommissioned or converted	Not in Alternative	Not in Alternative
6275	0.276	Limited FS admin use only	Not in Alternative	Not in Alternative
6276	0.757	Decommissioned or converted	Not in Alternative	Not in Alternative
6277	1.444	Decommissioned or converted	Not in Alternative	Not in Alternative
6353	1.120	Limited FS admin use only	No Use	Decommissioned or Converted
6353	0.173	MVUM-open, hwy-legal vehicles, yearlong	Haul Road- FS System Road	No Change to Road Status
6353	0.802	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
6354	0.121	Closed unless re-opened with NEPA	No Use	No Change to Road Status
6355	0.333	Decommissioned or converted	Not in Alternative	Not in Alternative
6356	0.496	Limited FS admin use only	No Use	Decommissioned or Converted
6357	1.857	Closed unless re-opened with NEPA	No Use	No Change to Road Status
6360	0.371	Limited FS admin use only	Not in Alternative	No Change to Road Status
6361	0.172	Limited FS admin use only	No Use	Decommissioned or Converted
743	1.877	MVUM-open, all vehicles, yearlong	Not in Alternative	Not in Alternative
789	0.583	Decommissioned or converted	Haul Road- Outside Project Area	Limited FS Admin Use Only

<b>Road Number</b>	<b>Mileage</b>	<b>Current Travel Management Status</b>	<b>Use In Alternative 4</b>	<b>Post Project Travel Management Status</b>
789	1.246	Decommissioned or converted	Haul Road- Limited FS Admin Use Only	Limited FS Admin Use Only
789	0.169	Decommissioned or converted	No Use	No Change to Road Status
789	0.376	Decommissioned or converted	Haul Road- Temp on Existing Road prism	Rehabilitate Road Prism
9122J	0.217	Limited FS admin use only	No Use	Decommissioned or Converted
9122J	0.410	Decommissioned or converted	Not in Alternative	Not in Alternative
9122J	0.483	Limited FS admin use only	Not in Alternative	Not in Alternative
9128H	0.252	Decommissioned or converted	Not in Alternative	Not in Alternative
9128Y	0.100	MVUM-open, hwy-legal vehicles, yearlong	Haul Road- FS System Road	No Change to Road Status
9128Y	0.262	Closed unless re-opened with NEPA	No Use	No Change to Road Status
9128Y	0.402	Limited FS admin use only	No Use	No Change to Road Status
9128Y	0.178	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9129Y	0.445	Closed unless re-opened with NEPA	No Use	Decommissioned or Converted
9131W	0.102	Decommissioned or converted	Not in Alternative	Not in Alternative
9166K	0.827	Closed unless re-opened with NEPA	No Use	Decommissioned or Converted
9166M	0.134	Closed unless re-opened with NEPA	No Use	Decommissioned or Converted
9166N	1.376	Closed unless re-opened with NEPA	No Use	No Change to Road Status
9173A	0.119	MVUM-open, all vehicles, yearlong	No Use	No Change to Road Status
9173B	0.160	Decommissioned or converted	No Use	No Change to Road Status
9173D	0.265	Closed unless re-opened with NEPA	No Use	Decommissioned or Converted

<b>Road Number</b>	<b>Mileage</b>	<b>Current Travel Management Status</b>	<b>Use In Alternative 4</b>	<b>Post Project Travel Management Status</b>
A	2.541	N/A	Haul Road-Temp	Rehabilitate Road Prism
AA	0.086	N/A	Haul Road-Temp	Rehabilitate Road Prism
B	0.261	N/A	Haul Road-Temp	Rehabilitate Road Prism
BB	1.031	N/A	Not in Alternative	Not in Alternative
C	0.158	N/A	Haul Road-Temp on Existing Road prism	Rehabilitate Road Prism
CC	0.144	N/A	Not in Alternative	Not in Alternative
D	1.158	N/A	Haul Road-Temp	Rehabilitate Road Prism
DD	0.371	N/A	Haul Road-Temp	Rehabilitate Road Prism
E	0.197	N/A	Relocate FR789	Limited FS Admin Use Only
F	0.283	N/A	Not in Alternative	Not in Alternative
FF	0.502	N/A	Haul Road-Temp	Rehabilitate Road Prism
G	0.055	N/A	Not in Alternative	Not in Alternative
GG	0.469	N/A	Haul Road-Relocate FR6353	Limited FS Admin Use Only
H	0.450	N/A	Not in Alternative	Not in Alternative
HH	0.218	N/A	Haul Road-Relocate FR789	Limited FS Admin Use Only
I	0.092	N/A	Not in Alternative	Not in Alternative
II	0.384	N/A	Haul Road-Relocate FR6353	Limited FS Admin Use Only
J	0.454	N/A	Haul Road-Temp on Existing Road prism	Rehabilitate Road Prism

<b>Road Number</b>	<b>Mileage</b>	<b>Current Travel Management Status</b>	<b>Use In Alternative 4</b>	<b>Post Project Travel Management Status</b>
JJ	0.311	N/A	Haul Road-Relocate FR6353	Limited FS Admin Use Only
K	0.809	N/A	Not in Alternative	Not in Alternative
L	0.285	N/A	Haul Road-Temp	Rehabilitate Road Prism
M	0.249	N/A	Not in Alternative	Not in Alternative
N	0.684	N/A	Haul Road-Temp	Rehabilitate Road Prism
O	0.840	N/A	Haul Road-Temp	Rehabilitate Road Prism
P	1.504	N/A	Haul Road-Temp	Rehabilitate Road Prism
Q	0.217	N/A	Haul Road-Temp	Rehabilitate Road Prism
R	0.486	N/A	Not in Alternative	Not in Alternative
R	0.063	N/A	Haul Road-Temp	Rehabilitate Road Prism
S	0.118	N/A	Not in Alternative	Not in Alternative
S	0.114	N/A	Haul Road-Temp	Rehabilitate Road Prism
T	0.078	N/A	Not in Alternative	Not in Alternative
U	0.336	N/A	Not in Alternative	Not in Alternative
V	0.588	N/A	Not in Alternative	Not in Alternative
W	0.163	N/A	Not in Alternative	Not in Alternative
X	0.349	N/A	Not in Alternative	Not in Alternative
Y	0.216	N/A	Not in Alternative	Not in Alternative
Z	0.570	N/A	Haul Road-Temp	Rehabilitate Road Prism



**Table 7: Road system associated with Alternative 4, Mormon Mountain**

<b>Road Number</b>	<b>Mileage</b>	<b>Current Road Management Status</b>	<b>Use Under Alternative 4</b>	<b>Post Project Road Management Status</b>
132	2.37	MVUM-open, public roads or highways	Haul Road- Outside Project Area	No Change to Road Status
132	4.49	MVUM-open, public roads or highways	Haul Road- FS System Road	No Change to Road Status
132A	2.52	MVUM-open, all vehicles, yearlong	Haul Road- Outside Project Area	No Change to Road Status
132A	1.59	MVUM-open, all vehicles, yearlong	Haul Road- FS System Road	No Change to Road Status
240	9.84	MVUM-open, hwy-legal vehicles, yearlong	Haul Road- Outside Project Area	No Change to Road Status
240	1.91	MVUM-open, public roads or highways	Haul Road- Outside Project Area	No Change to Road Status
648	0.96	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
648	2.15	MVUM-open, all vehicles, yearlong	Haul Road- FS System Road	No Change to Road Status
9410X	0.98	Limited FS admin use only	Haul Road- Outside Project Area	No Change to Road Status
9411	0.33	Limited FS admin use only	Haul Road- Outside Project Area	No Change to Road Status
9411A	0.28	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9411B	0.45	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9411C	0.10	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9417P	0.21	Decommissioned or converted	Haul Road- Temp on Existing Road Prism	Rehabilitate Road Prism
9421M	0.16	Closed unless re-opened with NEPA	Haul Road- Outside Project Area	No Change to Road Status
9421M	0.52	Closed unless re-opened with NEPA	Haul Road- FS System Road	No Change to Road Status

<b>Road Number</b>	<b>Mileage</b>	<b>Current Road Management Status</b>	<b>Use Under Alternative 4</b>	<b>Post Project Road Management Status</b>
9421N	0.60	Closed unless re-opened with NEPA	Haul Road- FS System Road	No Change to Road Status
9421P	0.23	Decommissioned or converted	No Use	No Change to Road Status
9459C	0.79	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9459D	0.03	Limited FS admin use only	Haul Road- Outside Project Area	No Change to Road Status
9459D	0.18	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9460	0.69	Decommissioned or converted	Haul Road- Temp on Existing Road Prism	Rehabilitate Road Prism
9460	0.35	Decommissioned or converted	No Use	No Change to Road Status
9465W	0.22	Decommissioned or converted	No Use	No Change to Road Status
9465X	0.33	Closed unless re-opened with NEPA	Haul Road- FS System Road	No Change to Road Status
9465Y	0.43	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9466D	0.36	Decommissioned or converted	No Use	No Change to Road Status
9466F	0.22	Decommissioned or converted	No Use	No Change to Road Status
9466G	0.19	Decommissioned or converted	No Use	No Change to Road Status
9466K	0.11	Decommissioned or converted	No Use	No Change to Road Status
9466P	0.34	Decommissioned or converted	Haul Road- Temp on Existing Road Prism	Rehabilitate Road Prism
9466Q	0.08	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9466X	3.51	Limited FS admin use only	Haul Road- FS System Road	No Change to Road Status
9466X	0.19	Limited FS admin use only	No Use	Decommissioned or Converted
9467	0.50	Decommissioned or converted	Haul Road- Temp on	Rehabilitate Road Prism

Road Number	Mileage	Current Road Management Status	Use Under Alternative 4	Post Project Road Management Status
			Existing Road Prism	
9468	0.22	Decommissioned or converted	Haul Road-Temp on Existing Road Prism	Rehabilitate Road Prism
9469	0.21	Decommissioned or converted	Haul Road-Temp on Existing Road Prism	Rehabilitate Road Prism
9471X	0.36	Decommissioned or converted	No Use	No Change to Road Status
KK	0.36	N/A	Haul Road-Temp on Existing Road Prism	Rehabilitate Road Prism
LL	1.04	N/A	Not in Alt	Not in Alt
MM	0.53	N/A	Haul Road-Relocate FR9466X	Limited FS Admin Use Only
NN	0.07	N/A	Not in Alt	Not in Alt

### *Comparative Summary of Alternatives*

Table 8 and Table 9 show a comparative summary the transportation system for all action alternatives

**Table 8: Comparison of transportation systems proposed for each action alternative, Dry Lake Hills**

	Alternative 2	Alternative 3	Alternative 4
System haul roads within the project area	18.07 miles	18.07miles	13.04 miles
System haul roads outside the project area	14.33 miles	14.33 miles	7.37 miles
New temporary haul roads constructed	14.64 miles	9.91 miles	9.20 miles
Temporary roads on existing road prisms	2.75 miles	2.75 miles	0.99 miles
Temporary road rehabilitated	17.39 miles	12.66 miles	10.19 miles
Relocated system road used as haul road	1.57 miles	1.57 miles	1.57 miles
System road	4.19 miles	4.19 miles	4.19 miles

decommissioned			
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**Table 9: Comparison of transportation systems proposed for each action alternative, Mormon Mountain**

	Alternative 2	Alternative 3	Alternative 4
System haul roads within the project area	16.46 miles	16.46 miles	16.46 miles
System haul roads outside the project area	18.13 miles	18.13 miles	18.13 miles
New temporary haul roads constructed	1.07 miles	0 miles	0 miles
Temporary roads on existing road prisms	2.52 miles	2.52 miles	2.52 miles
Temporary road rehabilitated	3.59 miles	2.52 miles	2.52 miles
Relocated system road used as haul road	0.53 miles	0.53 miles	0.53 miles
System road decommissioned	0.19 miles	0.19 miles	0.19 miles

## Monitoring Recommendations

None

## References (Literature Cited)

USDA Forest Service. 1987. Coconino National Forest Land and Resource Management Plan, as amended. Flagstaff, Arizona.